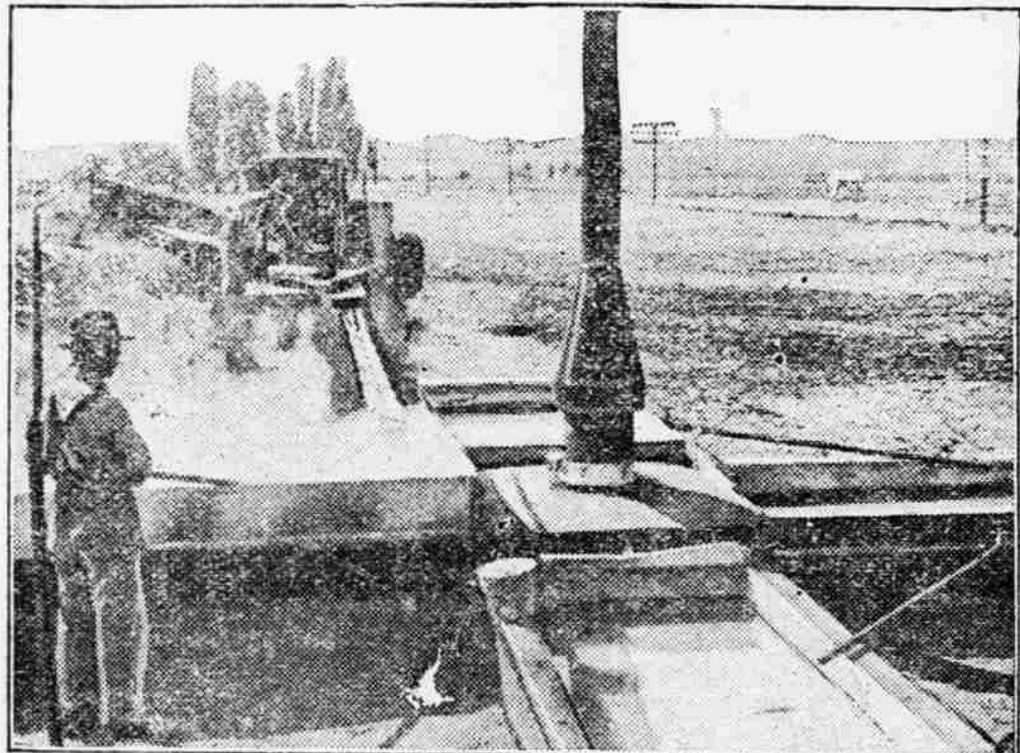


INCREASE PRODUCTION OF SORGHUM SIRUP TO RELIEVE SUGAR SHORTAGE



A Home or Community Sorghum Sirup Mill in Operation.

As a simple, practical means of helping relieve the acute sugar and sirup shortage, the United States department of agriculture recommends the increased production of sorghum sirup which, it is pointed out, requires neither unusual skill nor expensive equipment to make. Furthermore, the methods of growing sorghum are similar to those of corn and in that respect involve little that is new to many farmers. Sirup manufacture is so simple that it can be carried on with profit by individuals utilizing small-sized outfits of a daily capacity of 100 gallons or less. Where operations on a larger scale are feasible, community plants having a daily capacity of several hundred gallons are suggested by the department.

Sorghum sirup is palatable and pleasant flavored, and is an excellent table sirup. It can also be used as a substitute for other sirups or for sugar in making certain breads, cakes, etc., and as a substitute for a part of the sugar used in making preserves and the like. The cost of producing it at home is relatively low and usually an individual manufacturing it can realize a profit. Sorghum is produced during the 1919 season brought the producers from 90 cents to \$1.50 a gallon, depending on quality, marketing conditions, etc. Thus far the supply has fallen far short of the market demand.

Productive Source of Sirup.

The sorghum plant is similar in appearance to corn, growing about the same height and possessing about the same color. It may be grown throughout the United States in practically all regions where corn is grown, though parts of the extreme northern tier of states have a growing season usually too short for sweet sorghum.



Patch of Sweet Sorghum (Early Amber) Nearly Ready to Be Harvested.

to mature. In growing sorghum for sirup care should be taken to secure seeds of a sweet sorghum variety, and for planting in the North, one which matures quickly.

Sweet sorghum is grown from seed and is planted in rows about three and one-half feet apart. The plants should stand from four to six inches apart in the row. Approximately from five to eight pounds of seed is needed to the acre. Ordinarily planting time falls soon after corn planting, when the soil has become thoroughly warm. The stalks of the plants are ready for sirup making when the seeds which form heads at the top of the stalks are in the late dough stage; that is, just before they become dry and hard.

Necessary Machinery.

The machinery necessary for making sirup consists of a mill for extracting the juice from the cane and an evaporator for reducing the juice to sirup. The mill contains three iron rollers between which the sorghum stalks are passed to press out the juice. It may be operated by a gasoline engine or by a sweep drawn by horses.

The usual type of evaporator consists of a rectangular, flat-bottomed pan of galvanized iron or copper. Evaporation may be produced by direct contact with fire or with steam. In the former case the pan is mounted on a specially constructed firebox. If steam evaporation is employed the pan is provided with steam coils which lie on the bottom of the pan. In some cases a double-bottomed pan

is used, the space so provided being employed to carry the steam.

Other Equipment Needed.

Other articles needed are barrels or tubs for catching the juice, pipes for conducting it to the pan, skimmers for removing the scum, apparatus for testing the sirup consistency and barrels or cans for holding the finished product.

In making a sirup the blades of the plants are stripped off, the sorghum cut at about six inches from the ground, the seed heads removed. The sorghum is passed through the mill with as little delay as possible. When the weather is cool or there is danger of frost, the sorghum may be cut considerably in advance of pressing for when properly piled, it will keep for several days. The juice extracted by the mill is strained and then run into the evaporating pan. As it passes through the pan it quickly comes to a boiling point and a scum rises to the surface. This should be constantly and carefully removed.

Sirup should be evaporated to a point where it contains not less than 70 per cent solids; that is, has a weight of not less than 11 1/4 pounds to the gallon. If placed in containers while boiling hot and properly sealed, it will keep indefinitely.

The department's publication describes in detail the methods of manufacture, including the clarification of the juice if such is desired, and the utilization of by-products. The latter include the blades of the plants which make excellent feed for cattle, the bagasse (the stalk from which the juice has been removed), the scum which may be fed to hogs in small quantities, and seed heads which also have a feeding value.

The average yield of sirup an acre is from 75 to 200 gallons, although in some cases it has been as high as 400 gallons. The estimates on the yield of seed an acre vary from 600 to 1,000 pounds.

The United States department of agriculture has prepared a brief summary of information regarding the growing of sorghum, and the equipment necessary to make sirup. A copy of this circular may be had by addressing the department of agriculture, Washington, D. C. Those desiring more detailed information in regard to the subject should ask the department for Farmer's Bulletin 477, "Sorghum Sirup Manufacture."

BEWARE TURKISTAN ALFALFA

Imported Plant Is Decidedly Inferior to Our Native Seed—Yield of Hay Smaller.

Large quantities of alfalfa seed are being imported from Turkistan. This Turkistan alfalfa, according to the United States department of agriculture, is decidedly inferior to our native alfalfa as grown in Kansas and Nebraska. It is neither so hardy as our native alfalfa, nor does it yield as much hay. Turkistan alfalfa seed may be recognized by the fact that it contains invariably a small Russian knapweed seed. These seeds are slightly larger than alfalfa, chalky white in color and slightly wedge-shaped.

HOW TUBERCULOSIS SPREADS

Irrefutably Developed That Direct Contact With Infected Animals Is Chief Cause.

Careful study of tuberculosis has irrefutably developed the fact that direct contact with infected animals is the chief way in which tuberculosis is spread throughout the dairy stables on American farms. The common drinking trough is responsible for the harboring and spread of the disease, while contaminated hay, straw and feed which have been contaminated with sputum or discharges from diseased animals serve also to transmit the disease.

POISON BAIT FOR CUTWORMS

Bran or Cornmeal, Paris Green and Molasses Made Into Stiff Dough Is Effective.

When cutworms are bad in the cornfield make poison bait by mixing 50 pounds of bran or cornmeal, two pounds of Paris green and two quarts of cheap molasses to make a stiff dough. Add a little water if needed to moisten. Scatter this along the corn rows. This poison will kill birds, too; so be careful about using it.

POULTRY

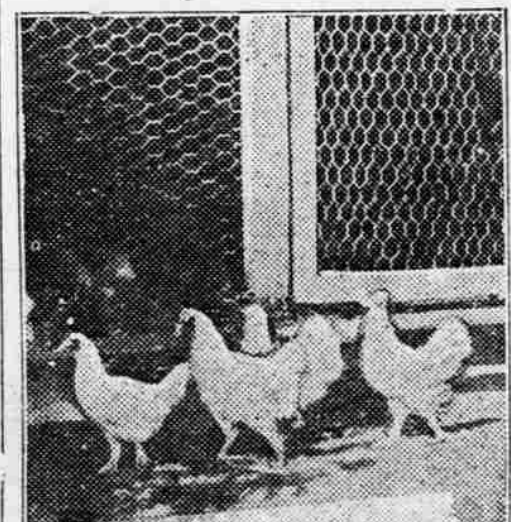
MITES ARE MOST INJURIOUS

Little Insects Suck Blood of Hen and Seriously Affect Her Ability to Lay Eggs.

If the best results are to be expected from the poultry flock, the buildings must not be allowed to become overrun with mites. Mites are more troublesome and more harmful than lice. They do not live upon the birds like the lice, but during the day hide in the cracks and crevices of the roosts and walls of the house, and at night they come out and get upon the fowls. They suck the hen's blood, and if allowed to become plentiful—as they certainly will if not destroyed—will seriously affect her health and consequently her ability to lay eggs.

Mites may be eradicated by a few thorough applications of kerosene or some of the coal-tar products which are sold for this purpose, or crude petroleum, to the interior of the poultry house.

The commercial coal-tar products are more expensive but retain their killing power longer, and they may be cheapened by reducing with an equal part of kerosene. Crude petroleum will spray better if thinned with one part of kerosene to four parts of the crude oil, according to poultry specialists of the United States department of agriculture. Both the crude



Open Front House Is Best for Summer—It Is Easy to Keep Clean.

petroleum and the coal-tar products often contain foreign particles, so should be strained before attempting to spray. One must be sure that the spray reaches all of the cracks and crevices, giving special attention to the roosts, dropping-boards, and nests, and the treatment should be repeated two or three times at intervals of a week or 10 days.

GUINEA FOWLS ARE FAVORED

Hardest of All Domestic Poultry and Great Husbands—They Keep Away Marauders.

There is no good reason why more guineas should not be kept on the farm. They are just about the hardest of all domestic fowls, and perhaps also the greatest hustlers, yet they seldom do their hustling to the injury of the garden or lawn. While quite domestic in their habits if treated gently, their wild nature leads them to remote parts of the homestead, where they pick up a large part of their living that would be overlooked by any other kind of fowl.

On farms infested with hawks, guineas are very valuable, their vigorous protests against every approach of the foe actually frighten them away. And no strange cat or dog can come on the place without their emphatic protest.

GOOD SHELTER FOR TURKEYS

Plain, Substantial House of Shed-Roof Type, Dry and Ventilated Is Recommended.

A plain, substantial house of the shed-roof type, dry, amply lighted and well ventilated, is the better way for providing shelter for turkeys.

Such a house simplifies the keeping of turkeys, and has many commendable features, for the successful turkey farmer, besides making easy the care and attention necessary at certain seasons of the year.

TURNING EGGS FOR HATCHING

Not Necessary, According to Professor Kaupp, Expert of North Carolina Station.

Turning eggs while saving them for hatching, although generally recommended and practiced by poultry keepers, is believed to be unnecessary. Rather thorough tests conducted by Prof. B. F. Kaupp of North Carolina station show no gain in hatch ability of eggs turned every day over similar lots which were kept undisturbed until placed in the incubator.

FOWLS GET LAZY IN SUMMER

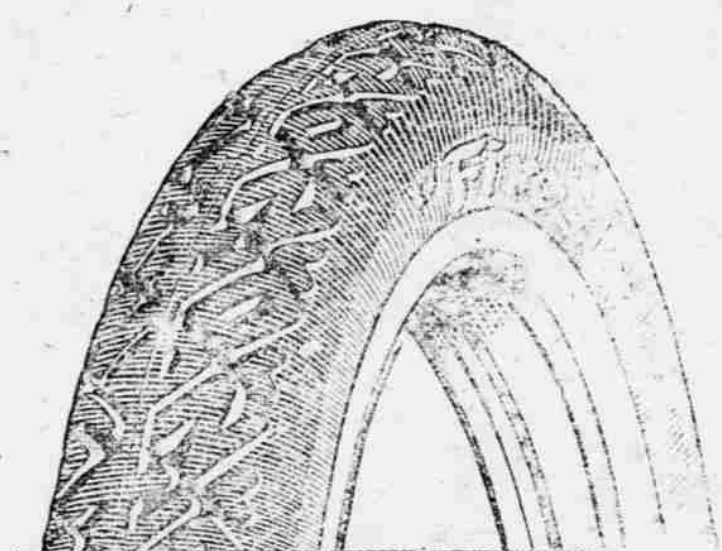
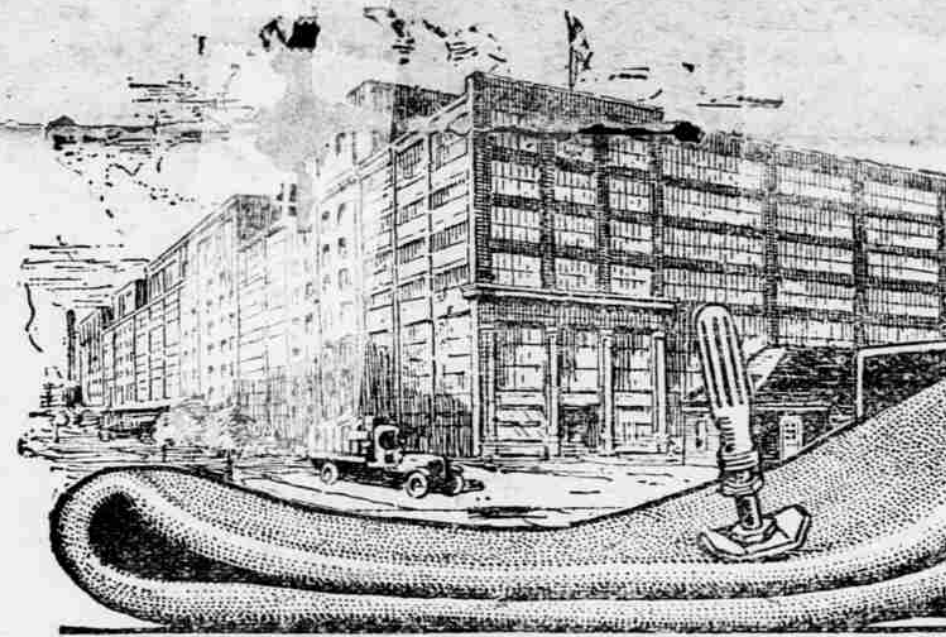
Some Hens Are So Inactive That They Do Not Earn Their Feed During Hot Weather.

As a rule hens do not show great activity during hot weather, but there are some which become so lazy that they are not worth their feeding. These are the hens that cut down their egg yield. Hot weather is worse for hens than cold weather, for during the winter months a hen with any life in her will busy herself to keep warm.

Firestone

Sales of this tire have increased 96% the first six months of this year, proving the balanced tire, the Firestone 3 1/2 has accomplished what Firestone sought for it, more mileage, greater economy, greater comfort, which has been passed on to the public at low cost—most miles per dollar.

Balanced! That means to you more than mere thickness of tread, greater air capacity, more plies of fabric, greater cushioning, or the gauge of the sidewall. It means that all component parts of the Firestone 3 1/2 are scientifically balanced by specialists who have put years of study and practice into a single purpose—to meet your demand in a small car tire. You can now have all four tires on your car give uniform service if they are Firestone.



30x3 1/2
(non skid)
\$22.50
Gray Tube \$3.75
Red Tube \$4.50



IS YOUR HEALTH GRADUALLY SLIPPING?

Interesting Experience of a Texas Lady Who Declares That if More Women Knew About Cardui They Would Be Spared Much Sickness and Worry.

Navasota, Texas.—Mrs. W. M. Peden, of this place, relates the following interesting account of how she recovered her strength, having realized that she was actually losing her health:

"Health is the greatest thing in the world, and when you feel that gradually slipping away from you, you certainly sit up and take notice. That is what I did some time ago when I found myself in a very nervous, run-down condition of health. I was so tired and felt so listless I could hardly go to it."

"I was just no account for work. I would get a bucket of water and would feel so weak I would have to set it down before I felt like I could lift it to the shelf. In this condition, of course, to do even my housework was a task almost impossible to accomplish."

"I was . . . nervous and easily upset."

I couldn't rest well at night and was . . . just listless."

"I heard of Cardui and after reading I decided I had some female trouble that was pulling me down. I sent for Cardui and began it."

"In a very short while after I began the Cardui Home Treatment I saw an improvement and it wasn't long until I was all right—good appetite, splendid rest, and much stronger so that I easily did my house work."

"Later I took a bottle of Cardui as a tonic. I can recommend Cardui and gladly do so, for if more women knew, it would save a great deal of worry and sickness."

The enthusiastic praise of thousands of other women who have found Cardui helpful should convince you that it is worth trying. All druggists sell it.

1. 78

Now Pays Big Profits

A GOOD spreader more than paid its way when corn was 50c and wheat \$1.00 a bushel. Now it pays big profits. Corn belt farmers, using Low Cloverleaf spreaders, harvest as much as 32 bushels more of corn off properly-manured acres than off those not treated with the spreader. Without adding another acre, another man, or another horse power, a Low Cloverleaf manure spreader increases the yield from every farm on which it is properly used.

The Low Cloverleaf Manure Spreader

The Low Cloverleaf is a wide spreading, easy running, light draft, narrow box spreader, made in three handy sizes—small, medium and large. The wide spreading device catches the manure as it comes from the beater, breaks it up in still finer particles, and throws it out beyond the wheel tracks in a wide, even spread. This is the kind of fertilizing recommended by all authorities.

The entire load is spread in 3 to 7 minutes. The machine runs easily and lasts a long time because the working parts are all securely fastened to a sturdy steel frame which keeps them all in place and in line.

The Low Cloverleaf spreader does the work as it should be done and begins to pay for itself at once. Place your order now.



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